

# Unified Application System 10

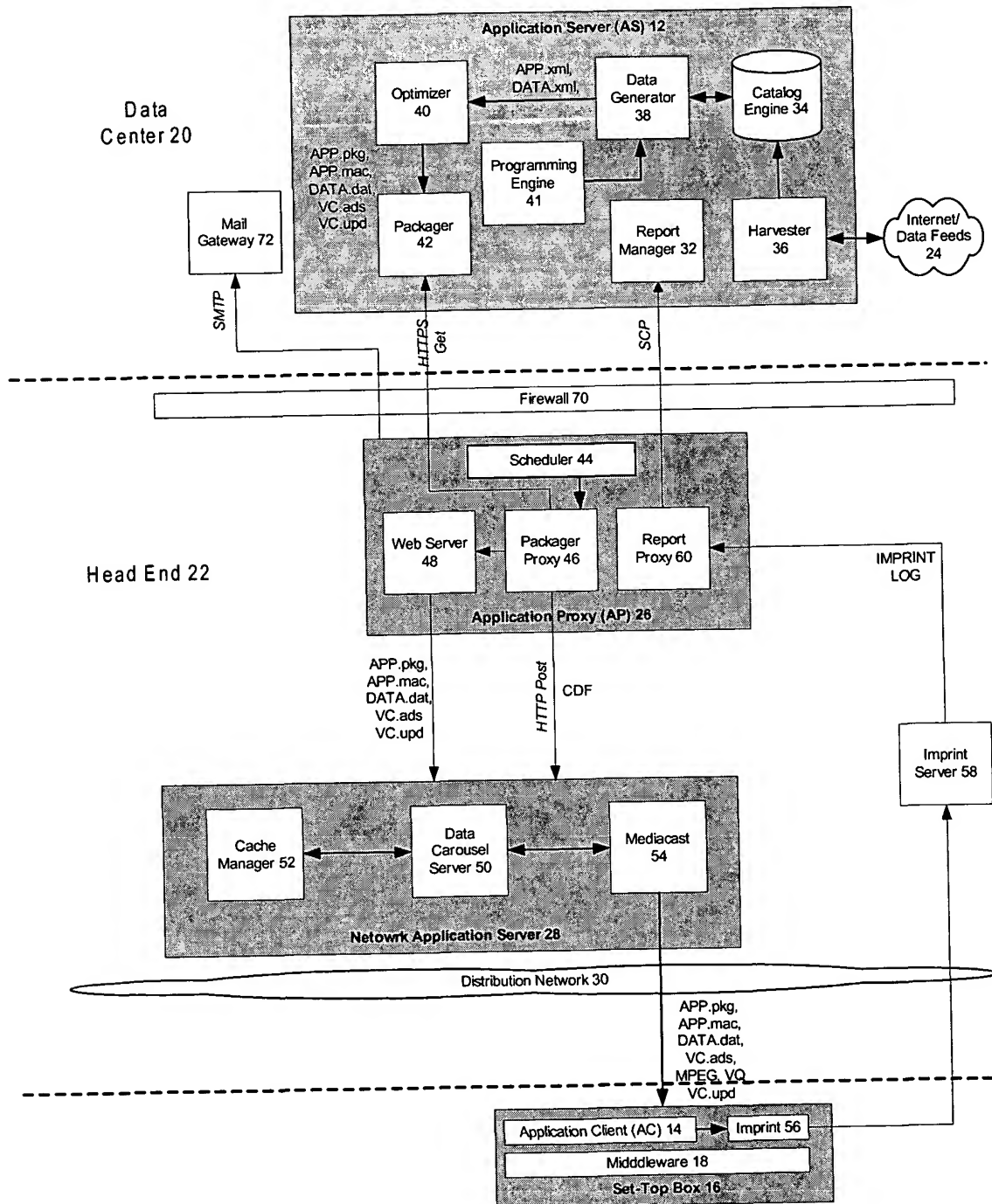


Fig. 1

Unified Application System 10

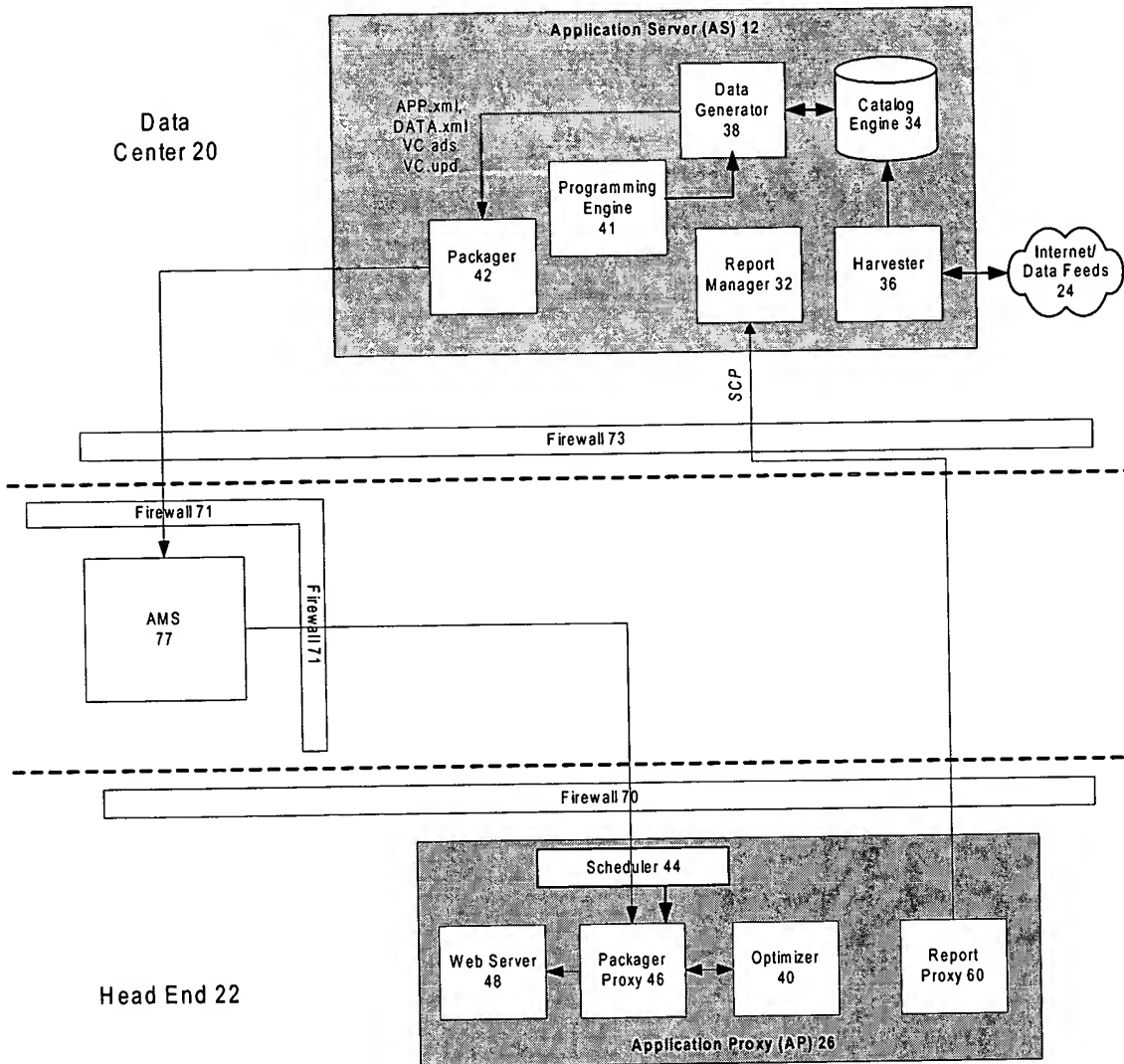


Fig. 1A

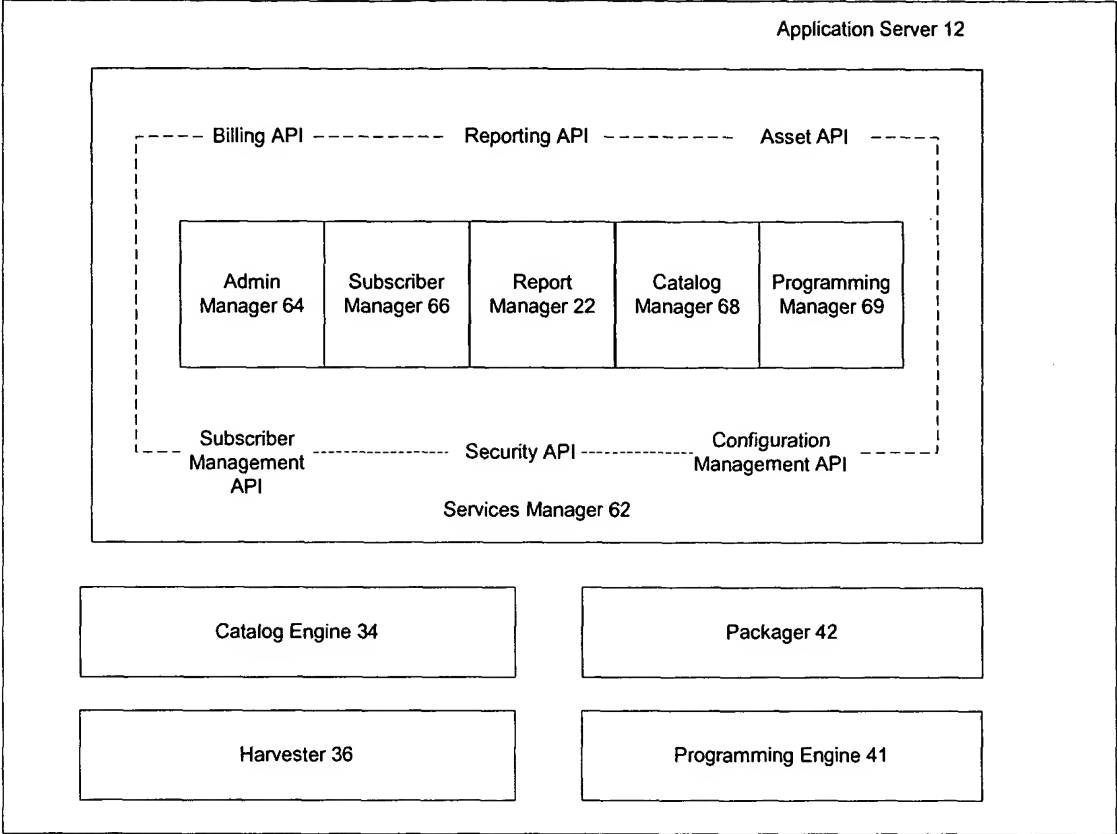


Fig. 2

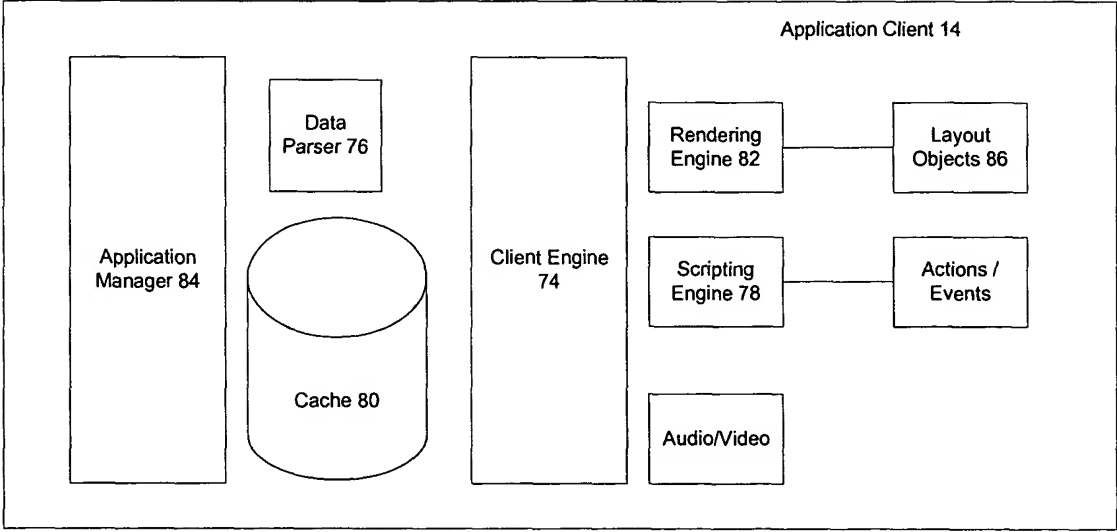


Fig. 3

Schema **macjc\_1\_0.xsd**

Elements	Simple types
<u>ad</u>	<u>adtype</u>
<u>br</u>	<u>align</u>
<u>button</u>	<u>channel</u>
<u>checkbox</u>	<u>height</u>
<u>color</u>	<u>layer</u>
<u>datatable</u>	<u>offsetx</u>
<u>event</u>	<u>offsety</u>
<u>group</u>	<u>plane</u>
<u>image</u>	<u>style</u>
<u>include</u>	<u>type</u>
<u>mac</u>	<u>valign</u>
<u>navitem</u>	<u>value</u>
<u>navmap</u>	<u>width</u>
<u>navtemplate</u>	<u>x</u>
<u>p</u>	<u>y</u>
<u>page</u>	
<u>palette</u>	
<u>radio</u>	
<u>radiogroup</u>	
<u>rect</u>	
<u>select</u>	
<u>text</u>	
<u>timer</u>	
<u>var</u>	
<u>video</u>	

Fig. 4A

|

element **ad**


diagram						
used by	elements <u>group</u> <u>page</u>					
attributes	Name	Type	Use	Default	Fixed	Annotation
	height	height	required			
	link	xsd:IDREF	optional			
	width	width	required			
	x	x	required			
	y	y	required			
	name	xsd:NMTOKEN	optional			
	adtype	adtype	optional			
	key	xsd:string	required			
	style	style		3		
	textcolor	xsd:string		black		
source	<pre> &lt;xsd:element name="ad"&gt;   &lt;xsd:complexType&gt;     &lt;xsd:attribute name="height" type="height" use="required"/&gt;     &lt;xsd:attribute name="link" type="xsd:IDREF" use="optional"/&gt;     &lt;xsd:attribute name="width" type="width" use="required"/&gt;     &lt;xsd:attribute name="x" type="x" use="required"/&gt;     &lt;xsd:attribute name="y" type="y" use="required"/&gt;     &lt;xsd:attribute name="name" type="xsd:NMTOKEN" use="optional"/&gt;     &lt;xsd:attribute name="adtype" type="adtype" use="optional"/&gt;     &lt;xsd:attribute name="key" type="xsd:string" use="required"/&gt;     &lt;xsd:attribute name="style" type="style" default="3"/&gt;     &lt;xsd:attribute name="textcolor" type="xsd:string" default="black"/&gt;   &lt;/xsd:complexType&gt; &lt;/xsd:element&gt; </pre>					

Fig. 4B

element **br**


diagram						
used by	element <u>text</u>					
source	<pre> &lt;xsd:element name="br"&gt;   &lt;xsd:complexType/&gt; &lt;/xsd:element&gt; </pre>					

Fig. 4C

element: **checkbox**


diagram						
attributes	Name	Type	Use	Default	Fixed	Annotation
	hidden	xsd:' oolean		false		
	name	xsd:NMTOKEN	required			
	x	x	required			
	y	y	required			
	value		required			
	innercolor	xsd:string		transparent		
	outercolor	xsd:string		grey		
	filledcolor	xsd:string		black		
	checkcolor	xsd:string		gold		
	onfocus	xsd:string	optional			
	onblur	xsd:string	optional			
	onclick	xsd:string	optional			
source	<pre> &lt;xsd:element name="checkbox"&gt;   &lt;xsd:complexType&gt;     &lt;xsd:attribute name="hidden" type="xsd:' oolean" default="false"/&gt;     &lt;xsd:attribute name="name" type="xsd:NMTOKEN" use="required"/&gt;     &lt;xsd:attribute name="x" type="x" use="required"/&gt;     &lt;xsd:attribute name="y" type="y" use="required"/&gt;     &lt;xsd:attribute name="value" use="required"/&gt;     &lt;xsd:attribute name="innercolor" type="xsd:string" default="transparent"/&gt;     &lt;xsd:attribute name="outercolor" type="xsd:string" default="grey"/&gt;     &lt;xsd:attribute name="filledcolor" type="xsd:string" default="black"/&gt;     &lt;xsd:attribute name="checkcolor" type="xsd:string" default="gold"/&gt;     &lt;xsd:attribute name="onfocus" type="xsd:string" use="optional"/&gt;     &lt;xsd:attribute name="onblur" type="xsd:string" use="optional"/&gt;     &lt;xsd:attribute name="onclick" type="xsd:string" use="optional"/&gt;   &lt;/xsd:complexType&gt; &lt;/xsd:element&gt; </pre>					

Fig. 4D

element **button**


diagram	
type	extension of <b>xsd:string</b>
used by	elements <b>group page</b>

Fig. 4E-1

element: **button** (continued)

attributes	Name	Type	Use	Default	Fixed	Annotation
	disabled	xsd:boolean		false		
	height	height	required			
	hidden	xsd:boolean		false		
	name	xsd:ID	required			
	width	width	required			
	x	x	required			
	y	y	required			
	onfocus	xsd:string	optional			
	onblur	xsd:string	optional			
	onclick	xsd:string	optional			
	offsetx	offsetx	optional			
	offsety	offsety	optional			
	hotspot	xsd:integer		0		
	hotspotfocus	xsd:string		gold		
	hotspotselected	xsd:string		grey		
	bgcolor	xsd:string		transparent		
	align	align	optional			
	valign	valign	optional			
	navtemplate	xsd:IDREF	optional			
	navtemplatefocus	xsd:IDREF	optional			
	navtemplateselected	xsd:IDREF	optional			
	navtemplatedisabled	xsd:IDREF	optional			
source	<pre> &lt;xsd:element name="button"&gt;   &lt;xsd:complexType&gt;     &lt;xsd:simpleContent&gt;       &lt;xsd:extension base="xsd:string"&gt;         &lt;xsd:attribute name="disabled" type="xsd:boolean" default="false"/&gt;         &lt;xsd:attribute name="height" type="height" use="required"/&gt;         &lt;xsd:attribute name="hidden" type="xsd:boolean" default="false"/&gt;         &lt;xsd:attribute name="name" type="xsd:ID" use="required"/&gt;         &lt;xsd:attribute name="width" type="width" use="required"/&gt;         &lt;xsd:attribute name="x" type="x" use="required"/&gt;         &lt;xsd:attribute name="y" type="y" use="required"/&gt;         &lt;xsd:attribute name="onfocus" type="xsd:string" use="optional"/&gt;         &lt;xsd:attribute name="onblur" type="xsd:string" use="optional"/&gt;         &lt;xsd:attribute name="onclick" type="xsd:string" use="optional"/&gt;         &lt;xsd:attribute name="offsetx" type="offsetx" use="optional"/&gt;         &lt;xsd:attribute name="offsety" type="offsety" use="optional"/&gt;         &lt;xsd:attribute name="hotspot" default="0"&gt;           &lt;xsd:simpleType&gt;             &lt;xsd:restriction base="xsd:integer"&gt;               &lt;xsd:minInclusive value="0"/&gt;             &lt;/xsd:restriction&gt;           &lt;/xsd:simpleType&gt;         &lt;/xsd:attribute&gt;         &lt;xsd:attribute name="hotspotfocus" type="xsd:string" default="gold"/&gt;         &lt;xsd:attribute name="hotspotselected" type="xsd:string" default="grey"/&gt;         &lt;xsd:attribute name="bgcolor" type="xsd:string" default="transparent"/&gt;         &lt;xsd:attribute name="align" type="align" use="optional"/&gt;         &lt;xsd:attribute name="valign" type="valign" use="optional"/&gt;         &lt;xsd:attribute name="navtemplate" type="xsd:IDREF" use="optional"/&gt;         &lt;xsd:attribute name="navtemplatefocus" type="xsd:IDREF" use="optional"/&gt;         &lt;xsd:attribute name="navtemplateselected" type="xsd:IDREF" use="optional"/&gt;         &lt;xsd:attribute name="navtemplatedisabled" type="xsd:IDREF" use="optional"/&gt;       &lt;/xsd:extension&gt;     &lt;/xsd:simpleContent&gt;   &lt;/xsd:complexType&gt; &lt;/xsd:element&gt; </pre>					

Fig. 4E-2

**element color**


diagram						
used by	element <b>palette</b>					
attributes	Name	Type	Use	Default	Fixed	Annotation
	name	xsd:NMTOKEN	optional			
	value	value	required			
source	<pre>&lt;xsd:element name="color"&gt;   &lt;xsd:complexType&gt;     &lt;xsd:attribute name="name" type="xsd:NMTOKEN" use="optional"/&gt;     &lt;xsd:attribute name="value" type="value" use="required"/&gt;   &lt;/xsd:complexType&gt; &lt;/xsd:element&gt;</pre>					

Fig. 4F

**element datatable**


diagram						
used by	element <b>mac</b>					
attributes	Name	Type	Use	Default	Fixed	Annotation
	name	xsd:NMTOKEN	required			
	table	xsd:string	optional			
	src	xsd:string	required			
source	<pre>&lt;xsd:element name="datatable"&gt;   &lt;xsd:complexType&gt;     &lt;xsd:attribute name="name" type="xsd:NMTOKEN" use="required"/&gt;     &lt;xsd:attribute name="table" type="xsd:string" use="optional"/&gt;     &lt;xsd:attribute name="src" type="xsd:string" use="required"/&gt;   &lt;/xsd:complexType&gt; &lt;/xsd:element&gt;</pre>					

Fig. 4G



element event


diagram						
used by	element <u>mac</u>					
attributes	Name	Type	Use	Default	Fixed	Annotation
	onkey	xsd:string	optional			
source	<pre>&lt;xsd:element name="event"&gt;   &lt;xsd:complexType&gt;     &lt;xsd:attribute name="onkey" type="xsd:string" use="optional"/&gt;   &lt;/xsd:complexType&gt; &lt;/xsd:element&gt;</pre>					

Fig. 4H

element **group**

diagram						
children	<u>ad</u> <u>button</u> <u>image</u> <u>select</u> <u>text</u> <u>rect</u>					
used by	element <u>page</u>					
attributes	Name	Type	Use	Default	Fixed	Annotation
	hidden	xsd:boolean		false		
	name	xsd:NMTOKEN	required			
	x	x	required			
	y	y	required			
	prevbutton	xsd:IDREF	optional			
	nextbutton	xsd:IDREF	optional			
	paging	xsd:boolean		false		
	width	width	required			
	height	height	required			
	startindex	xsd:string		0		
source	<pre> &lt;xsd:element name="group"&gt;   &lt;xsd:complexType&gt;     &lt;xsd:choice minOccurs="0" maxOccurs="unbounded"&gt;       &lt;xsd:element ref="ad"/&gt;       &lt;xsd:element ref="button"/&gt;       &lt;xsd:element ref="image"/&gt;       &lt;xsd:element ref="select"/&gt;       &lt;xsd:element ref="text"/&gt;       &lt;xsd:element ref="rect"/&gt;     &lt;/xsd:choice&gt;     &lt;xsd:attribute name="hidden" type="xsd:boolean" default="false"/&gt;     &lt;xsd:attribute name="name" type="xsd:NMTOKEN" use="required"/&gt;     &lt;xsd:attribute name="x" type="x" use="required"/&gt;     &lt;xsd:attribute name="y" type="y" use="required"/&gt;     &lt;xsd:attribute name="prevbutton" type="xsd:IDREF" use="optional"/&gt;     &lt;xsd:attribute name="nextbutton" type="xsd:IDREF" use="optional"/&gt;     &lt;xsd:attribute name="paging" type="xsd:boolean" default="false"/&gt;     &lt;xsd:attribute name="width" type="width" use="required"/&gt;     &lt;xsd:attribute name="height" type="height" use="required"/&gt;     &lt;xsd:attribute name="startindex" default="0"&gt;       &lt;xsd:simpleType&gt;         &lt;xsd:restriction base="xsd:string"/&gt;       &lt;/xsd:simpleType&gt;     &lt;/xsd:attribute&gt;   &lt;/xsd:complexType&gt; &lt;/xsd:element&gt; </pre>					

Fig. 4I

element **image**


diagram						
used by	elements <b>group page</b>					
attributes	Name	Type	Use	Default	Fixed	Annotation
	height	height	required			
	hidden	xsd:boolean		false		
	name	xsd:ID	optional			
	src	xsd:string	required			
	width	width	required			
	x	x	required			
	y	y	required			
	layer	layer	optional			
	bgcolor	xsd:string		transparent		
source	<pre>&lt;xsd:element name="image"&gt;   &lt;xsd:complexType&gt;     &lt;xsd:attribute name="height" type="height" use="required"/&gt;     &lt;xsd:attribute name="hidden" type="xsd:boolean" default="false"/&gt;     &lt;xsd:attribute name="name" type="xsd:ID" use="optional"/&gt;     &lt;xsd:attribute name="src" type="xsd:string" use="required"/&gt;     &lt;xsd:attribute name="width" type="width" use="required"/&gt;     &lt;xsd:attribute name="x" type="x" use="required"/&gt;     &lt;xsd:attribute name="y" type="y" use="required"/&gt;     &lt;xsd:attribute name="layer" type="layer" use="optional"/&gt;     &lt;xsd:attribute name="bgcolor" type="xsd:string" default="transparent"/&gt;   &lt;/xsd:complexType&gt; &lt;/xsd:element&gt;</pre>					

Fig. 4J

element **include**


diagram						
used by	element <b>page</b>					
attributes	Name	Type	Use	Default	Fixed	Annotation
	src	xsd:string	required			
source	<pre>&lt;xsd:element name="include"&gt;   &lt;xsd:complexType&gt;     &lt;xsd:attribute name="src" type="xsd:string" use="required"/&gt;   &lt;/xsd:complexType&gt; &lt;/xsd:element&gt;</pre>					

Fig. 4K

element mac

diagram	
children	<u><b>datatable</b></u> <u><b>var</b></u> <u><b>navmap</b></u> <u><b>event</b></u> <u><b>timer</b></u> <u><b>palette</b></u> <u><b>page</b></u>
source	<pre> &lt;xsd:element name="mac"&gt;   &lt;xsd:complexType&gt;     &lt;xsd:sequence&gt;       &lt;xsd:choice minOccurs="0" maxOccurs="unbounded"&gt;         &lt;xsd:element ref="datatable"/&gt;         &lt;xsd:element ref="var"/&gt;         &lt;xsd:element ref="navmap"/&gt;         &lt;xsd:element ref="event"/&gt;         &lt;xsd:element ref="timer"/&gt;       &lt;/xsd:choice&gt;       &lt;xsd:element ref="palette" minOccurs="0"/&gt;       &lt;xsd:element ref="page" minOccurs="0"/&gt;     &lt;/xsd:sequence&gt;   &lt;/xsd:complexType&gt; &lt;/xsd:element&gt; </pre>

Fig. 4L

element **navitem**


diagram						
used by	element <b>navmap</b>					
attributes	Name	Type	Use	Default	Fixed	Annotation
	object	xsd:string	optional			
	navup	xsd:string	optional			
	navdown	xsd:string	optional			
	navleft	xsd:string	optional			
	navright	xsd:string	optional			
source	<pre> &lt;xsd:element name="navitem"&gt;   &lt;xsd:complexType&gt;     &lt;xsd:attribute name="object" type="xsd:string" use="optional"/&gt;     &lt;xsd:attribute name="navup" type="xsd:string" use="optional"/&gt;     &lt;xsd:attribute name="navdown" type="xsd:string" use="optional"/&gt;     &lt;xsd:attribute name="navleft" type="xsd:string" use="optional"/&gt;     &lt;xsd:attribute name="navright" type="xsd:string" use="optional"/&gt;   &lt;/xsd:complexType&gt; &lt;/xsd:element&gt; </pre>					

Fig. 4M

element **navmap**


diagram						
children	<b>navitem</b>					
used by	element <b>mac</b>					
source	<pre> &lt;xsd:element name="navmap"&gt; .   &lt;xsd:complexType&gt;     &lt;xsd:sequence minOccurs="0" maxOccurs="unbounded"&gt;       &lt;xsd:element ref="navitem"/&gt;     &lt;/xsd:sequence&gt;   &lt;/xsd:complexType&gt; &lt;/xsd:element&gt; </pre>					

Fig. 4N

element **navtemplate**


diagram						
used by	element <b>page</b>					
attributes	Name	Type	Use	Default	Fixed	Annotation
	name	xsd:ID	optional			
	textcolor	xsd:string		black		
	style	style		3		
	color	xsd:string		transparent		
	leftcolor	xsd:string		transparent		
	rightcolor	xsd:string		transparent		
	topcolor	xsd:string		transparent		
	bottomcolor	xsd:string		transparent		
source	<pre>&lt;xsd:element name="navtemplate"&gt;   &lt;xsd:complexType&gt;     &lt;xsd:attribute name="name" type="xsd:ID" use="optional"/&gt;     &lt;xsd:attribute name="textcolor" type="xsd:string" default="black"/&gt;     &lt;xsd:attribute name="style" type="style" default="3"/&gt;     &lt;xsd:attribute name="color" type="xsd:string" default="transparent"/&gt;     &lt;xsd:attribute name="leftcolor" type="xsd:string" default="transparent"/&gt;     &lt;xsd:attribute name="rightcolor" type="xsd:string" default="transparent"/&gt;     &lt;xsd:attribute name="topcolor" type="xsd:string" default="transparent"/&gt;     &lt;xsd:attribute name="bottomcolor" type="xsd:string" default="transparent"/&gt;   &lt;/xsd:complexType&gt; &lt;/xsd:element&gt;</pre>					

Fig. 4O

element **p**


diagram						
used by	element <b>text</b>					
source	<pre>&lt;xsd:element name="p"&gt;   &lt;xsd:complexType/&gt; &lt;/xsd:element&gt;</pre>					

Fig. 4P

element **page**

diagram						
children	<b>ad button group image include navtemplate select text rect video</b>					
used by	element <b>mac</b>					
attributes	Name	Type	Use	Default	Fixed	Annotation
	background	xsd:string	optional			
	defaultfocus	xsd:string	optional			
	bgcolor	xsd:string		transparent		
	onload	xsd:string	optional			
	selectedbutton	xsd:string	optional			
	main	xsd:boolean		false		
source	<pre> &lt;xsd:element name="page"&gt;   &lt;xsd:complexType&gt;     &lt;xsd:choice minOccurs="0" maxOccurs="unbounded"&gt;       &lt;xsd:element ref="ad"/&gt;       &lt;xsd:element ref="button"/&gt;       &lt;xsd:element ref="group"/&gt;       &lt;xsd:element ref="image"/&gt;       &lt;xsd:element ref="include"/&gt;       &lt;xsd:element ref="navtemplate"/&gt;       &lt;xsd:element ref="select"/&gt;       &lt;xsd:element ref="text"/&gt;       &lt;xsd:element ref="rect"/&gt;       &lt;xsd:element ref="video"/&gt;     &lt;/xsd:choice&gt;     &lt;xsd:attribute name="background" type="xsd:string" use="optional"/&gt;     &lt;xsd:attribute name="defaultfocus" type="xsd:string" use="optional"/&gt;     &lt;xsd:attribute name="bgcolor" type="xsd:string" default="transparent"/&gt;     &lt;xsd:attribute name="onload" type="xsd:string" use="optional"/&gt;     &lt;xsd:attribute name="selectedbutton" type="xsd:string" use="optional"/&gt;     &lt;xsd:attribute name="main" type="xsd:boolean" default="false"/&gt;   &lt;/xsd:complexType&gt; &lt;/xsd:element&gt; </pre>					

Fig. 4Q

element **palette**


diagram	
children	<u>color</u>
used by	element <u>mac</u>
source	<pre> &lt;xsd:element name="palette"&gt;   &lt;xsd:complexType&gt;     &lt;xsd:sequence minOccurs="0" maxOccurs="unbounded"&gt;       &lt;xsd:element ref="color"/&gt;     &lt;/xsd:sequence&gt;   &lt;/xsd:complexType&gt; &lt;/xsd:element&gt; </pre>

Fig. 4R



element **radio**

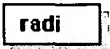
diagram						
used by	element <b><u>radiogroup</u></b>					
attributes	Name	Type	Use	Default	Fixed	Annotation
	hidden	xsd:boolean		false		
	name	xsd:NMTOKEN	required			
	x	x	required			
	y	y	required			
	value		required			
	innercolor	xsd:string		transparent		
	outercolor	xsd:string		grey		
	filledcolor	xsd:string		black		
	checkcolor	xsd:string		gold		
	onfocus	xsd:string	optional			
	onblur	xsd:string	optional			
	onclick	xsd:string	optional			
source	<pre> &lt;xsd:element name="radio"&gt;   &lt;xsd:complexType&gt;     &lt;xsd:attribute name="hidden" type="xsd:boolean" default="false"/&gt;     &lt;xsd:attribute name="name" type="xsd:NMTOKEN" use="required"/&gt;     &lt;xsd:attribute name="x" type="x" use="required"/&gt;     &lt;xsd:attribute name="y" type="y" use="required"/&gt;     &lt;xsd:attribute name="value" use="required"/&gt;     &lt;xsd:attribute name="innercolor" type="xsd:string" default="transparent"/&gt;     &lt;xsd:attribute name="outercolor" type="xsd:string" default="grey"/&gt;     &lt;xsd:attribute name="filledcolor" type="xsd:string" default="black"/&gt;     &lt;xsd:attribute name="checkcolor" type="xsd:string" default="gold"/&gt;     &lt;xsd:attribute name="onfocus" type="xsd:string" use="optional"/&gt;     &lt;xsd:attribute name="onblur" type="xsd:string" use="optional"/&gt;     &lt;xsd:attribute name="onclick" type="xsd:string" use="optional"/&gt;   &lt;/xsd:complexType&gt; &lt;/xsd:element&gt; </pre>					

Fig. 4S

element **radiogroup**


diagram						
children	<b>radio</b>					
attributes	Name	Type	Use	Default	Fixed	Annotation
	hidden	xsd:boolean		false		
	name	xsd:NMTOKEN	required			
	initselected	xsd:IDREF	required			
	value		required			
source	<pre> &lt;xsd:element name="radiogroup"&gt;   &lt;xsd:complexType&gt;     &lt;xsd:choice minOccurs="0" maxOccurs="unbounded"&gt;       &lt;xsd:element ref="radio"/&gt;     &lt;/xsd:choice&gt;     &lt;xsd:attribute name="hidden" type="xsd:boolean" default="false"/&gt;     &lt;xsd:attribute name="name" type="xsd:NMTOKEN" use="required"/&gt;     &lt;xsd:attribute name="initselected" type="xsd:IDREF" use="required"/&gt;     &lt;xsd:attribute name="value" use="required"/&gt;   &lt;/xsd:complexType&gt; &lt;/xsd:element&gt; </pre>					

Fig. 4T

## element rect


diagram						
used by	elements <a href="#">group page</a>					
attributes	Name	Type	Use	Default	Fixed	Annotation
	name	xsd:NMTOKEN	optional			
	border	xsd:integer		0		
	bordercolor	xsd:string	optional			
	color	xsd:string		grey		
	x	x	required			
	y	y	required			
	xradius	xsd:integer		5		
	yradius	xsd:integer		5		
	height	height	required			
	width	width	required			
	round	xsd:boolean		false		
	hidden	xsd:boolean		false		
source	<pre> &lt;xsd:element name="rect"&gt;   &lt;xsd:complexType&gt;     &lt;xsd:attribute name="name" type="xsd:NMTOKEN" use="optional"/&gt;     &lt;xsd:attribute name="border" default="0"&gt;       &lt;xsd:simpleType&gt;         &lt;xsd:restriction base="xsd:integer"&gt;           &lt;xsd:minInclusive value="0"/&gt;         &lt;/xsd:restriction&gt;       &lt;/xsd:simpleType&gt;     &lt;/xsd:attribute&gt;     &lt;xsd:attribute name="bordercolor" type="xsd:string" use="optional"/&gt;     &lt;xsd:attribute name="color" type="xsd:string" default="grey"/&gt;     &lt;xsd:attribute name="x" type="x" use="required"/&gt;     &lt;xsd:attribute name="y" type="y" use="required"/&gt;     &lt;xsd:attribute name="xradius" default="5"&gt;       &lt;xsd:simpleType&gt;         &lt;xsd:restriction base="xsd:integer"&gt;           &lt;xsd:minInclusive value="0"/&gt;         &lt;/xsd:restriction&gt;       &lt;/xsd:simpleType&gt;     &lt;/xsd:attribute&gt;     &lt;xsd:attribute name="yradius" default="5"&gt;       &lt;xsd:simpleType&gt;         &lt;xsd:restriction base="xsd:integer"&gt;           &lt;xsd:minInclusive value="0"/&gt;         &lt;/xsd:restriction&gt;       &lt;/xsd:simpleType&gt;     &lt;/xsd:attribute&gt;     &lt;xsd:attribute name="height" type="height" use="required"/&gt;     &lt;xsd:attribute name="width" type="width" use="required"/&gt;     &lt;xsd:attribute name="round" type="xsd:boolean" default="false"/&gt;     &lt;xsd:attribute name="hidden" type="xsd:boolean" default="false"/&gt;   &lt;/xsd:complexType&gt; &lt;/xsd:element&gt; </pre>					

Fig. 4U

element select


diagram						
used by	elements <a href="#">group page</a>					
attributes	Name	Type	Use	Default	Fixed	Annotation
	bgcolor	xsd:string		transparent		
	height	height	required			
	hidden	xsd:boolean		false		
	name	xsd:ID	required			
	plane	plane		vertical		
	width	width	required			
	x	x	required			
	y	y	required			
	optionpad	xsd:integer		0		
	index	xsd:integer	optional			
	moreprev	xsd:IDREF	optional			
	morenext	xsd:IDREF	optional			
	onfocus	xsd:string	optional			
	onblur	xsd:string	optional			
	datasrc	xsd:string	optional			
	align	align	optional			
	valign	valign	optional			
	maxcount	xsd:integer		1		
	startindex	xsd:string		0		
	hlwidth	xsd:integer	required			
	hlheight	xsd:integer	required			
	navtemplate	xsd:IDREF	optional			
	navtemplatefocus	xsd:IDREF	optional			
	navtemplateselectd	xsd:IDREF	optional			
	navtemplatedisabled	xsd:IDREF	optional			
	onclick	xsd:string	optional			
	onfocusoption	xsd:string	optional			
	displayindex	xsd:integer		0		

Fig. 4V-1

## element: select (continued)

source	<pre> &lt;xsd:element name="select"&gt;   &lt;xsd:complexType&gt;     &lt;xsd:attribute name="bgcolor" type="xsd:string" default="transparent"/&gt;     &lt;xsd:attribute name="height" type="height" use="required"/&gt;     &lt;xsd:attribute name="hidden" type="xsd:boolean" default="false"/&gt;     &lt;xsd:attribute name="name" type="xsd:ID" use="required"/&gt;     &lt;xsd:attribute name="plane" type="plane" default="vertical"/&gt;     &lt;xsd:attribute name="width" type="width" use="required"/&gt;     &lt;xsd:attribute name="x" type="x" use="required"/&gt;     &lt;xsd:attribute name="y" type="y" use="required"/&gt;     &lt;xsd:attribute name="optionpad" default="0"&gt;       &lt;xsd:simpleType&gt;         &lt;xsd:restriction base="xsd:integer"&gt;           &lt;xsd:minInclusive value="0"/&gt;         &lt;/xsd:restriction&gt;       &lt;/xsd:simpleType&gt;     &lt;/xsd:attribute&gt;     &lt;xsd:attribute name="index" use="optional"&gt;       &lt;xsd:simpleType&gt;         &lt;xsd:restriction base="xsd:integer"&gt;           &lt;xsd:maxInclusive value="0"/&gt;         &lt;/xsd:restriction&gt;       &lt;/xsd:simpleType&gt;     &lt;/xsd:attribute&gt;     &lt;xsd:attribute name="moreprev" type="xsd:IDREF" use="optional"/&gt;     &lt;xsd:attribute name="morenext" type="xsd:IDREF" use="optional"/&gt;     &lt;xsd:attribute name="onfocus" type="xsd:string" use="optional"/&gt;     &lt;xsd:attribute name="onblur" type="xsd:string" use="optional"/&gt;     &lt;xsd:attribute name="datasrc" type="xsd:string" use="optional"/&gt;     &lt;xsd:attribute name="align" type="align" use="optional"/&gt;     &lt;xsd:attribute name="valign" type="valign" use="optional"/&gt;     &lt;xsd:attribute name="maxcount" default="1"&gt;       &lt;xsd:simpleType&gt;         &lt;xsd:restriction base="xsd:integer"&gt;           &lt;xsd:minInclusive value="1"/&gt;         &lt;/xsd:restriction&gt;       &lt;/xsd:simpleType&gt;     &lt;/xsd:attribute&gt;   &lt;/xsd:complexType&gt; &lt;/xsd:element&gt; </pre>
--------	---

Fig. 4V-2

element: **select** (continued)

```

</xsd:attribute>
  <xsd:attribute name="startindex" default="0">
    <xsd:simpleType>
      <xsd:restriction base="xsd:string"/>
    </xsd:simpleType>
  </xsd:attribute>
  <xsd:attribute name="hlwidth" use="required">
    <xsd:simpleType>
      <xsd:restriction base="xsd:integer">
        <xsd:minInclusive value="0"/>
      </xsd:restriction>
    </xsd:simpleType>
  </xsd:attribute>
  <xsd:attribute name="hlheight" use="required">
    <xsd:simpleType>
      <xsd:restriction base="xsd:integer">
        <xsd:minInclusive value="0"/>
      </xsd:restriction>
    </xsd:simpleType>
  </xsd:attribute>
  <xsd:attribute name="navtemplate" type="xsd:IDREF" use="optional"/>
  <xsd:attribute name="navtemplatefocus" type="xsd:IDREF" use="optional"/>
  <xsd:attribute name="navtemplateselection" type="xsd:IDREF" use="optional"/>
  <xsd:attribute name="navtemplatedisabled" type="xsd:IDREF" use="optional"/>
  <xsd:attribute name="onclick" type="xsd:string" use="optional"/>
  <xsd:attribute name="onfocusoption" type="xsd:string" use="optional"/>
  <xsd:attribute name="displayindex" default="0">
    <xsd:simpleType>
      <xsd:restriction base="xsd:integer">
        <xsd:minInclusive value="0"/>
      </xsd:restriction>
    </xsd:simpleType>
  </xsd:attribute>
</xsd:complexType>
</xsd:element>

```

Fig. 4V-3

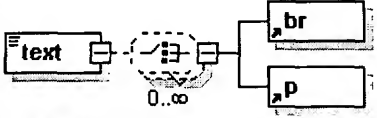
element text						
diagram						
children	<b><u>br p</u></b>					
used by	elements <b><u>group page</u></b>					
attributes	Name	Type	Use	Default	Fixed	Annotation
	border	xsd:integer		0		
	bordercolor	xsd:string	optional			
	height	height	required			
	hidden	xsd:boolean		false		
	textcolor	xsd:string		black		
	name	xsd:ID	required			
	width	width	required			
	x	x	required			
	y	y	required			
	offsetx	offsetx	optional			
	offsety	offsety	optional			
	bgcolor	xsd:string		transparent		
	prevbutton	xsd:IDREF	optional			
	nextbutton	xsd:IDREF	optional			
	style	style		3		
	paging	xsd:boolean		false		
	avoid	xsd:IDREF	optional			
	prevpage	xsd:string	optional			
	startindex	xsd:string		0		
	padding	xsd:integer		0		
	align	align	optional			
	valign	valign	optional			
	ellipsis	xsd:boolean		false		

Fig. 4W-1

element: text (continued)

source	<pre> &lt;xsd:element name="text"&gt;   &lt;xsd:complexType mixed="true"&gt;     &lt;xsd:choice minOccurs="0" maxOccurs="unbounded"&gt;       &lt;xsd:element ref="br"/&gt;       &lt;xsd:element ref="p"/&gt;     &lt;/xsd:choice&gt;     &lt;xsd:attribute name="border" default="0"&gt;       &lt;xsd:simpleType&gt;         &lt;xsd:restriction base="xsd:integer"&gt;           &lt;xsd:minInclusive value="0"/&gt;         &lt;/xsd:restriction&gt;       &lt;/xsd:simpleType&gt;     &lt;/xsd:attribute&gt;     &lt;xsd:attribute name="bordercolor" type="xsd:string" use="optional"/&gt;     &lt;xsd:attribute name="height" type="height" use="required"/&gt;     &lt;xsd:attribute name="hidden" type="xsd:boolean" default="false"/&gt;     &lt;xsd:attribute name="textcolor" type="xsd:string" default="black"/&gt;     &lt;xsd:attribute name="name" type="xsd:ID" use="required"/&gt;     &lt;xsd:attribute name="width" type="width" use="required"/&gt;     &lt;xsd:attribute name="x" type="x" use="required"/&gt;     &lt;xsd:attribute name="y" type="y" use="required"/&gt;     &lt;xsd:attribute name="offsetx" type="offsetx" use="optional"/&gt;     &lt;xsd:attribute name="offsety" type="offsety" use="optional"/&gt;     &lt;xsd:attribute name="bgcolor" type="xsd:string" default="transparent"/&gt;     &lt;xsd:attribute name="prevbutton" type="xsd:IDREF" use="optional"/&gt;     &lt;xsd:attribute name="nextbutton" type="xsd:IDREF" use="optional"/&gt;     &lt;xsd:attribute name="style" type="style" default="3"/&gt;     &lt;xsd:attribute name="paging" type="xsd:boolean" default="false"/&gt;     &lt;xsd:attribute name="avoid" type="xsd:IDREF" use="optional"/&gt;     &lt;xsd:attribute name="prevpage" type="xsd:string" use="optional"/&gt;     &lt;xsd:attribute name="startindex" default="0"&gt;       &lt;xsd:simpleType&gt;         &lt;xsd:restriction base="xsd:string"/&gt;       &lt;/xsd:simpleType&gt;     &lt;/xsd:attribute&gt;     &lt;xsd:attribute name="padding" default="0"&gt;       &lt;xsd:simpleType&gt;         &lt;xsd:restriction base="xsd:integer"&gt;           &lt;xsd:minInclusive value="0"/&gt;         &lt;/xsd:restriction&gt;       &lt;/xsd:simpleType&gt;     &lt;/xsd:attribute&gt;     &lt;xsd:attribute name="align" type="align" use="optional"/&gt;     &lt;xsd:attribute name="valign" type="valign" use="optional"/&gt;     &lt;xsd:attribute name="ellipsis" type="xsd:boolean" default="false"/&gt;   &lt;/xsd:complexType&gt; &lt;/xsd:element&gt; </pre>
--------	---

Fig. 4W-2



element **timer**


diagram						
used by	element <b>mac</b>					
attributes	Name	Type	Use	Default	Fixed	Annotation
	name	xsd:NMTOKEN	required			
	period	xsd:integer	required			
	ontimer	xsd:string	optional			
source	<pre>&lt;xsd:element name="timer"&gt;   &lt;xsd:complexType&gt;     &lt;xsd:attribute name="name" type="xsd:NMTOKEN" use="required"/&gt;     &lt;xsd:attribute name="period" type="xsd:integer" use="required"/&gt;     &lt;xsd:attribute name="ontimer" type="xsd:string" use="optional"/&gt;   &lt;/xsd:complexType&gt; &lt;/xsd:element&gt;</pre>					

Fig. 4X

element **var**


diagram						
type	extension of <b>xsd:string</b>					
used by	element <b>mac</b>					
attributes	Name	Type	Use	Default	Fixed	Annotation
	id	xsd:NMTOKEN	required			
	type	type	required			
source	<pre>&lt;xsd:element name="var"&gt;   &lt;xsd:complexType&gt;     &lt;xsd:simpleContent&gt;       &lt;xsd:extension base="xsd:string"&gt;         &lt;xsd:attribute name="id" type="xsd:NMTOKEN" use="required"/&gt;         &lt;xsd:attribute name="type" type="type" use="required"/&gt;       &lt;/xsd:extension&gt;     &lt;/xsd:simpleContent&gt;   &lt;/xsd:complexType&gt; &lt;/xsd:element&gt;</pre>					

Fig. 4Y

element **video**

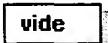
diagram						
used by	element <b>page</b>					
attributes	Name	Type	Use	Default	Fixed	Annotation
	x	x	required			
	y	y	required			
	width	width	required			
	height	height	required			
	channel	channel	optional			
source	<pre>&lt;xsd:element name="video"&gt;   &lt;xsd:complexType&gt;     &lt;xsd:attribute name="x" type="x" use="required"/&gt;     &lt;xsd:attribute name="y" type="y" use="required"/&gt;     &lt;xsd:attribute name="width" type="width" use="required"/&gt;     &lt;xsd:attribute name="height" type="height" use="required"/&gt;     &lt;xsd:attribute name="channel" type="channel" use="optional"/&gt;   &lt;/xsd:complexType&gt; &lt;/xsd:element&gt;</pre>					

Fig. 4Z

simpleType **adtype**

type	restriction of <b>xsd:string</b>
used by	attribute <b>ad/@adtype</b>
facets	enumeration image enumeration text enumeration bitmap
source	<pre>&lt;xsd:simpleType name="adtype"&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="image"/&gt;     &lt;xsd:enumeration value="text"/&gt;     &lt;xsd:enumeration value="bitmap"/&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>

Fig. 4AA

simpleType align

type	restriction of <b>xsd:string</b>
used by	attributes <b><u>button/@align</u></b> <b><u>text/@align</u></b> <b><u>select/@align</u></b>
facets	enumeration left enumeration center enumeration right
source	<pre>&lt;xsd:simpleType name="align"&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="left"/&gt;     &lt;xsd:enumeration value="center"/&gt;     &lt;xsd:enumeration value="right"/&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>

Fig. 4BB

simpleType channel

type	restriction of <b>xsd:integer</b>
used by	attribute <b><u>video/@channel</u></b>
facets	minInclusive 0 maxInclusive 999
source	<pre>&lt;xsd:simpleType name="channel"&gt;   &lt;xsd:restriction base="xsd:integer"&gt;     &lt;xsd:maxInclusive value="999"/&gt;     &lt;xsd:minInclusive value="0"/&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>

Fig. 4CC

**simpleType height**

type	restriction of xsd:integer
used by	attributes <u>ad/@height</u> <u>group/@height</u> <u>button/@height</u> <u>text/@height</u> <u>image/@height</u> <u>select/@height</u> <u>rect/@height</u> <u>video/@height</u>
facets	minInclusive 0 maxInclusive 480
source	<xsd:simpleType name="height"> <xsd:restriction base="xsd:integer"> <xsd:maxInclusive value="480"/> <xsd:minInclusive value="0"/> </xsd:restriction> </xsd:simpleType>

Fig. 4DD

**simpleType layer**

type	restriction of xsd:string
used by	attribute <u>image/@layer</u>
facets	enumeration foreground enumeration middle enumeration background
source	<xsd:simpleType name="layer"> <xsd:restriction base="xsd:string"> <xsd:enumeration value="foreground"/> <xsd:enumeration value="middle"/> <xsd:enumeration value="background"/> </xsd:restriction> </xsd:simpleType>

Fig. 4EE

**simpleType offsetx**

type	restriction of <b>xsd:integer</b>
used by	attributes <b><u>button/@offsetx</u></b> <b><u>text/@offsetx</u></b>
facets	minInclusive 0 maxInclusive 480
source	<pre>&lt;xsd:simpleType name="offsetx"&gt;   &lt;xsd:restriction base="xsd:integer"&gt;     &lt;xsd:maxInclusive value="480"/&gt;     &lt;xsd:minInclusive value="0"/&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>

**Fig. 4FF**

**simpleType offsety**

type	restriction of <b>xsd:integer</b>
used by	attributes <b><u>button/@offsety</u></b> <b><u>text/@offsety</u></b>
facets	minInclusive 0 maxInclusive 704
source	<pre>&lt;xsd:simpleType name="offsety"&gt;   &lt;xsd:restriction base="xsd:integer"&gt;     &lt;xsd:maxInclusive value="704"/&gt;     &lt;xsd:minInclusive value="0"/&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>

**Fig. 4GG**

simpleType **plane**

type	restriction of <b>xsd:string</b>
used by	attribute <b><u>select/@plane</u></b>
facets	enumeration horizontal enumeration vertical
source	<pre>&lt;xsd:simpleType name="plane"&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="horizontal"/&gt;     &lt;xsd:enumeration value="vertical"/&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>

**Fig. 4HH**

simpleType **style**

type	restriction of <b>xsd:integer</b>
used by	attributes <b><u>navtemplate/@style</u></b> <b><u>ad/@style</u></b> <b><u>text/@style</u></b>
facets	enumeration 1 enumeration 2 enumeration 3 enumeration 4 enumeration 5 enumeration 6
source	<pre>&lt;xsd:simpleType name="style"&gt;   &lt;xsd:restriction base="xsd:integer"&gt;     &lt;xsd:enumeration value="1"/&gt;     &lt;xsd:enumeration value="2"/&gt;     &lt;xsd:enumeration value="3"/&gt;     &lt;xsd:enumeration value="4"/&gt;     &lt;xsd:enumeration value="5"/&gt;     &lt;xsd:enumeration value="6"/&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>

**Fig. 4II**

simpleType type

type	restriction of <b>xsd:string</b>
used by	attribute <b><u>var/@type</u></b>
facets	enumeration string enumeration int
source	<pre>&lt;xsd:simpleType name="type"&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="string"/&gt;     &lt;xsd:enumeration value="int"/&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>

**Fig. 4JJ**

simpleType valign

type	restriction of <b>xsd:string</b>
used by	attributes <b><u>button/@valign</u></b> <b><u>text/@valign</u></b> <b><u>select/@valign</u></b>
facets	enumeration top enumeration middle enumeration bottom
source	<pre>&lt;xsd:simpleType name="valign"&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:enumeration value="top"/&gt;     &lt;xsd:enumeration value="middle"/&gt;     &lt;xsd:enumeration value="bottom"/&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>

**Fig. 4KK**

**simpleType value**

type	restriction of <b>xsd:string</b>
used by	attribute <b><u>color/@value</u></b>
facets	maxLength 9 pattern <b>#?[0-9a-fA-F]{6,8}</b>
source	<pre>&lt;xsd:simpleType name="value"&gt;   &lt;xsd:restriction base="xsd:string"&gt;     &lt;xsd:maxLength value="9"/&gt;     &lt;xsd:pattern value="#?[0-9a-fA-F]{6,8}"/&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>

**Fig. 4LL**

**simpleType width**

type	restriction of <b>xsd:integer</b>
used by	attributes <b><u>ad/@width</u></b> <b><u>group/@width</u></b> <b><u>button/@width</u></b> <b><u>text/@width</u></b> <b><u>image/@width</u></b> <b><u>select/@width</u></b> <b><u>rect/@width</u></b> <b><u>video/@width</u></b>
facets	minInclusive 0 maxInclusive 704
source	<pre>&lt;xsd:simpleType name="width"&gt;   &lt;xsd:restriction base="xsd:integer"&gt;     &lt;xsd:maxInclusive value="704"/&gt;     &lt;xsd:minInclusive value="0"/&gt;   &lt;/xsd:restriction&gt; &lt;/xsd:simpleType&gt;</pre>

**Fig. 4MM**



simpleType x

type	restriction of <b>xsd:integer</b>
used by	attributes <b><u>ad/@x group/@x radio/@x checkbox/@x button/@x text/@x image/@x select/@x rect/@x video/@x</u></b>
facets	minInclusive -704 maxInclusive 1408
source	<xsd:simpleType name="x"> <xsd:restriction base="xsd:integer"> <xsd:maxInclusive value="1408"/> <xsd:minInclusive value="-704"/> </xsd:restriction> </xsd:simpleType>

Fig. 4NN

simpleType y

type	restriction of <b>xsd:integer</b>
used by	attributes <b><u>ad/@y group/@y radio/@y checkbox/@y button/@y text/@y image/@y select/@y rect/@y video/@y</u></b>
facets	minInclusive -480 maxInclusive 960
source	<xsd:simpleType name="y"> <xsd:restriction base="xsd:integer"> <xsd:maxInclusive value="960"/> <xsd:minInclusive value="-480"/> </xsd:restriction> </xsd:simpleType>

Fig. 400